Applicant(s):

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Daniel C. Guterman et al.

Title: Novel Multi-State Memory

Title. Novel Multi-State Memory

Application No.: Unassigned Filing Date: Herewith

Examiner: Unassigned Group Art Unit: Unassigned

Docket No.: SNDK.138USM Conf. No.: Unassigned

Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant(s) call(s) the documents listed on the enclosed Form PTO-1449 to the Examiner's attention in this patent application.

Copies of the documents listed on the accompanying Form PTO-1449 are enclosed.

Application claims an earlier effective filing date.

- Copies of the documents listed on the accompanying Form PTO-1449 that are not enclosed were previously submitted in Application No. 10/013,592, from which this
- This application has a filing date after June 30, 2003. Copies of the U.S. Patent(s) and
 - U.S. Published Patent Application(s) documents listed on the accompanying Form PTO-1449 are not enclosed

Citation of these documents shall not be construed as (1) an admission that the documents are prior art with respect to the invention or inventions claimed in this application, (2) a representation that a search has been made (other than as indicated by any cited document), or

Attorney Docket No.: SNDK.138USM

Express Mail No.: EV 437668010 US

(3) an admission that the cited information is, or is considered to be, material to patentability as defined in § 1.56(b).

This information disclosure statement is submitted under 37 C.F.R. § 1.97(b) and consequently no fee should be required. The Commissioner is authorized, however, to charge any fee that may be required, or to credit any overpayment, against Deposit Account No. 502664. This form is being submitted in duplicate.

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Respectfully submitted,

Gerald P. Parsons
Ree. No. 24,486

PARSONS HSUE & DE RUNTZ LLP 655 Montgomery Street, Suite 1800 San Francisco, CA 94111 (415) 318-1160 (415) 693-0194 (fax)

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	A15	5	2	0	0	9	2	2		1993	Rao				
	A16	5	2	3	9	5	0	5		1993	Fazio et al.				
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	A26	5	6	5	7	3	3	2	Н	1997	Auclair et al.		-	-	-
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/VN/	A35	5	3	2	7	3	8	3.	Γ	7/05/1994	Merchant et	al,			
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			U.S. PATENT DOCUMENT	rs		
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۸	5,341,334	8/1994	Ma	ruyama	3	85 189,11
8	5,675,537	8/1994	В	il et al.	3	65 185.22
С	5,703,506	12/1997	Sho	ok et al.	. 3:	27 87
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/VN/	1	4,827,450	May 2, 1989	Kowalski				
/VN/	2	5,070,032	Dec. 3, 1991	Yuan et al.	-			
/VN/	3	5,200,959	Apr. 6, 1993	Gross et al.				
	4	5,270,979	Dec. 14, 1993	Harari et al.				-
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/VN/	. 4	5,043,940	Aug. 27, 1991	Harari			-	1	
	2	5,172,338	Dec. 15, 1992	Mehrotra et al.			1.0	2.	-
	- 3	5,270,979	Dec. 14, 1993	Harari et al.					7.
	- 4	5,313,421	May 17, 1994	Guterman et al.				-	
-	5	5,315,541	May 24, 1994	Harari et al.	-			17	=
	6	5,430,859	Jul. 4, 1995	Norman et al.				1	
	7	5,434,825	Jul. 18, 1995	Harari		-		1	1
. *:	8	5,453,955	Sep. 26, 1995	Sakui et al.					
- 12	9	5,541,886	Jul. 30, 1996	Hasbun		-	1		×
	10	5,546,351	Aug. 13, 1996	Tanaka et al.					_
0.7	11	5,602,987	Feb. 11, 1997	Harari et al.		-		-	_
	12	5,629,892	May 13, 1997	Tang	7			×	
V ·	13	5,687,114	Nov. 11, 1997	Khan					-
/VN/ -	14	6,317,363 B1	Nov. 13, 2001	Guterman et al.			1.0	13	7
			Foreign	Patent Documents		,	- :		_
						. 1		Transl	ation
		, Document	Date	Country		Class	Subclass	Yes	N
/VN/	15	JP 7287984 A	1995 Jan. 31	Japan		3.1		Abstract :	. ,
	- 3	OTHER A	ART (Including A	athor, Title, Date, l	Pertinent I	ages, Etc	2)		- 2
		.5 1				7			1
	- 4					145	- X		4
	- 4	* 3	1. 1			-			1 1 1

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				y.* *-		K-138USE orly (M-102	49-14P US)	10/013,	592
INFOR	MATION	DISCLOSURE ST	ATEMENT BY	APPLICANT	Appl	icants	111	Confirm	ation
		(Use several sheets)	f necessary)		Danie	C. Gutern	un et al.	1251	
	141				Filing	Date		Art Unit	Grou
10,					Nove	mber 13, 20	01	2818	_
4			U.S	Patent Document	s		1.7		
Examiner Initial	×	Document Number	Date	Name	-	Class	Subclass		Date
/VN/	1	Re. 32,401	4/1987	Beilstein, Jr. e	t al.	-		App	roprist
T	2	4,074,304	2/1978	Shiba				_	
	3.	4,151,020	4/1979	McElroy				1	
	4	4,151,021	4/1979	McElroy			-		
	5	4,184,207	1/1980	McElroy				-	_
	6	4,202,044	5/1980	Beilstein, Jr. et	aL			1 7	
	7	4,271,421	6/1981	McElroy		1			
	8	4,302,766	11/1981	Guterman et al					
J	9	4,331,968	5/1982	Goency, Jr. et a	d.	-		-	
V ·	10	4,380,057	4/1983	Kotecha et al.				1-	
VN/	111	4,456,971	6/1984	Fukuda et al.				-	
			Foreig	n Patent Documen	ts				_
		-1-						Trans	lation
		Document	Date	Country	,	Class	Subclass	Yes	No
VN/	12	0373830	6/1990	- EP					х
VN/ ·	13	0725403A1	8/1996	EP				х	_
/N/	14	6-1181168	8/1986	Japan					x
VN/	15	. 1-304784	12/1989	. Japan					x
/N/	16	2-360 .	1/1990	Japan	-				x
				author, Title, Date,					_
/VN/	17	K. Naruke et al., "/ IEDM 89-603, IEE	New Flash-Er E (1989), pp. 6	ase EEPROM Cell 03-606.	with A	Sidewall Sel	ect-Gate On It	Source S	ide",
/VN/	18	M. Kamiya et al., * 741-744.	EPROM Cell w	ith High Gate Inje	ction Eff	iciency", IE	DM 82-741, IE	EE (1982), p.
VN/	19	J. Van Houdt, et al. Split-Gate Structure	, "A 5-Volt-Onl ", Interuniversi	ly Fast-Programma ty Microelectronic	ble Flash	EEPROM (Feb. 1991)	Cell with A Do	ouble Poly	silico
niner	/Viet N	guyen/ (07/01/20)	Date Considere	d	07/01/2	2008		-	
AMINER:		reference considered	1 whether or or	d citation is in one	6		609; Draw lir		_

U.S.	Departm	date: 03/2	itent and Trades	mark Office	Atty Do		09572 - 0		ation No
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		(Use several sheets	f necessary)		Daniel C	Gutern	un et al.	1251	
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					Novembe	r 13, 20	01	2818	
			U.S	Patent Documents			:		-
Examiner Initial		Document Number	Date	Nume		Class	Subclass		g Date I
/VN/	20	4,462,090	7/1984	lizuka				1	TOPLETIC
/VN/	21	4,488,265	12/1984	Kotecha				+-	
	22	4,561,004	12/1985	Kuo et al.		_		+	
	23	4,575,925	3/1986	Kanbara et al.		_		-	
	24	4,583,201	4/1986	Bertin et al.	-	_		_	1
	25	4,616,402	10/1986	Mori				1	-
	26 .	4,622,656	11/1986	Kamiya et al.		-1			
	27	4,652,897	3/1987	Okuyama et al.					
	28	4,663,827	5/1987	Nakahara		\neg			-
V	29	4,677,736	7/1987	Brown	- 1	_		-	
/VN/	30	4,794,565	12/1988	Wu et al.					
		-	Foreign	n Patent Documents			-	<u> </u>	
								Trans	slation
		Document :	Date	Country	1.0	lass	Subclass	Yes	No
/VN/ ·	31	WO 97/22123	6/1997 .	WIPO				х	_
/VN/	32	WO 90/12400	10/1990	. WIPO .				х	_
					X _X				-
					-1				
				uthor, Title, Date, P					
/VN/	33	Yale Ma, et al. "A I Density Flash Mem	Oual-bit Split-G ories", IEDM 9	ate EEPROM (DSG 4-57, IEEE (1994),) Cell in Copp. 57-60.	ontactles	s Array for Sir	ngle-Vcc i	High
/VN/	34	G.S. Alberts et al., '24, No. 7A (Dec.19	Multi-Bit Stora 81), pp. 3311-3	ige FET EAROM C	ell", G.S. II	3M Tech	mical Disclosu	re Bulleti	n, vol.
/VN/	35	Takeshi Nakayama, 1989), vol. 24, No.	"A 5-V-only O 5, pp. 911-915.	ne-Transistor 256K	EEPROM	with Pag	e-Mode Erase	", IEEE (A	Aug.
niner /	Viet Ng	uyen/ (07/01/2008)	Date Considered	1	07/01/20	08.			-
		reference considered							

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0.5.	Departm	ent of Commerce, r	atent and Trade	mark Office	Atty	Docket No.		Applic	atio
-						K.138USE erly (M-102	49-14P US)	10/013	,59
INFORM	AATION	DISCLOSURE ST.	ATEMENT BY	APPLICANT	Appl	licants		Confirm	mati
- 11		(Use several sheets	if necessary)		Dani	iel C. Gutern	an et al.	1251	_
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					Nove	mber 13, 20	01	2818	_
			· U.S	S. Patent Documents					
*Examiner Initial		Document Number	Date	Name		Class	Subclass	Filin	
	36	4,803,529	2/1989		_	Coass	Subclass	App	prop
1	37	4,805,142	2/1989			1-		-	
	38	4,811,285	3/1989		·	-		1	
	39	4.811.294	3/1989			+		-	
_	40	4,821,236	4/1989	S. Patent Documents Namouk Massouka Bertin et al. Walker et al. Kobayashi et al. Ilayashi et al. Cuppea et al. Ilasashi et al. Cupea et al. Ilasashi et al. Cupea et al. Country Country Author, Title, Date, Pert.	-	-		-	_
NNV NNV	41	4,862,418	8/1989	7		+		_	_
	42	4,943,962	7/1990		_	-			_
_	43	4,990,979	2/1991		_	-		-	
	44	4,997,781	3/1991		_	-		<u> </u>	_
$\overline{}$	45	5,011,787	4/1991			-		-	_
/VN/	46	5,017,515	5/1991			-			
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		OTHER A	RT (Including /	Author, Title, Date, I	Pertinen	rt Pages, Etc.)		_
/VN/	47	Mike McCounell, e vol. 26, No. 4, pp. 4	t al., "An Expe					EE (Apr.	199
/VN/	48	Masaki Momodomi (Apr. 1991), vol. 26	, et al., "A-4-M , No. 4, pp. 49.	lb Flash EEPROM v 2-495.	with Tig	th Programm	ned V.sub.t Di	stribution	", D
/VN/	49	Fujio Masuoka, et a (Aug. 1987)	L, "A 256-kbit	Flash E sup 2 PRO	M Using	Triple-Poly	silicon Techno	ology", IE	EE
aminer /V	iet Ngu	yen/ (07/01/2008))	Date Considere	d	07/01	1/2008	-		

0.5.	Departit	ent of Commerce,	itent and Trader	mark Office	-	Docket No.		Applic	ation No
						C.138USE rly (M-102	49-14P US)	10/013	,592
INFOR	MATION	DISCLOSURE ST.	ATEMENT BY	APPLICANT	Applie	cants	,	Confirm	nation N
		(Use several sheets	if necessary)		Danie	C. Gutern	nn et al.	1251	
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			U.S	Putent Document	5				
Examiner Initial	-	Document Number	Date	Name		Class	Subclass		g Date I
/VN/	50	5,028,553	7/1991	Esquivel et al.	-		- Dubbigg	App	propriate
	51	5,029,130	7/1991	Yeh		-		1	
	52	5,045,488	9/1991	Yeh	_			-	
	53	5,057,886	10/1991	Riemenschneid	cr et al.			1	
	54	5,067,108	11/1991	Jenq	-	-	-	-	
	55	5,070,032	12/1991	Yuan et al.	-	-		1	
	56	5,081,054	1/1992	Wu et al.				_	
	57	5,081,056	1/1992	Mazzali et al	\neg			 -	
	58	5,095,344	3/1992	Harari				_	
V	. 59	5,147,816	9/1992	Gill et al.					
/VN/	60	5,204,841	4/1993	Chappell et al.					
	-		Foreign	n Patent Document	s				
		- 7						Tran	slation
		Document	Date	Country	-	Class	Subclass	Yes	No
	_								
	_								
				author, Title, Date,					
/VN/	61	Dumitru Cioaca, et 692.	al., "A Million	Cycle 256K EEPR	OM", IEI	EE (Oct. 19	87), vol. SC-2	2, No. 5,	рр. 684
/VN/	62	Cristiano Calligaro IEEE (1995), pp. 2	et al., "A New 1-26.	Serial Sensing App	proach for	Multistora	ge Non-Volat	ile Memo	ries",
/VN/	63	Min-hwa Chi, et al. for Low-voltage Ap	, "Multi-level Fi plications", IEI	lash/EPROM Mem OM 95-271, IEEE (ories: Ne 1995), pp	w Self-conv . 271-274.	ergent Progra	mming M	lethods
miner	/Viet No	uyen/ (07/01/2008	Date Considered	d	07/01/20	nns			_
	Initial if	reference considered	i whether or no	t citation is in conf	òrmanos.	with MODE	600: Deer *		

U.S. E	Departmen	nt of Commerce, rat	tent and Tradeur	ark Office	Atty D	Docket No.		Applica	ation No.
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INFORM		DISCLOSURE STA		APPLICANT	Applic	ants		Confirm	nation No
	. (1	Use several sheets if	necessary)		Daniel	C. Guterm	an et al.	1251	
					Filing 1	Date		Art Uni	it Group
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-		-	U.S.	Patent Documents	s				-
*Examiner Initial		Document Number	Date	Name		Class	Subclass		g Date If
/VN/	64	5,218,569	6/1993	Banks	-	-	-	App	propriate
/yn/	65	5,225,361	7/1993	Kakiuchi et al.	7.			+-	
· /VN/	66	5,247,485	9/1993	Ide ··			-	+-	
/VN/	67	5,264,384	11/1993	Kaya et al.				+	
/VN/	68	5,278,439	1/1994	Ma et al.	\neg	-		+	
/VN/	69	5,279,982	1/1994 :	Crotti .	_			+	
/VN/	70	5,280,446	1/1994	Ma et al.	- 1	-		1	
/VN/	71	5,284,784	2/1994	Manley				-	
/VN/	72	5,297,148	3/1994	Harari et al.	-			-	
/VN/	73	5,323,355	6/1994	Kato :				_	
/VN/	74	5,355,347	10/1994	Cioaca	\neg	_		_	
			Foreign	Patent Document	is			<u> </u>	
								Trans	slation
		Document ·	Date	Country	. 1	Class	Subclass	Yes	No
								- 2.	$\overline{}$
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//N/	75	International Search	Results & Anne	x (Communicatio	on relating	to PCT/U	S98/15657).	1998	
		7	1.	0					1
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U.S. I	Departmen	tate: 03/2(17) at of Commerce, ra	tent and Trades	mark Office	Atty I	DOCKET No.		Applica	ation No.
						C138USE rly (M-102	49-14P US)	10/013,	592
INFORM	IATION I	DISCLOSURE STA	TEMENT BY	APPLICANT	Appli	eunts		Confirm	nation N
(a. 181	. (1	Use several sheets i	f necessary)	-	Danie	C. Gutern	an et al.	1251	
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			U.S.	Patent Documents	_				
Examiner Initial		Document Number	Date	Name		Class	Subclass		g Date I
/VN/	76	5,377,147	12/1994	Merchant et al.				1	
	77	5,378,643	1/1995	Ajika et al.		1			,
	78	5,396,468	3/1995	Harari et al.				1	
	79	5,412,600	5/1995	Nakajima				1	
	80 .	5,420,060	5/1995	Gill et al.				†	_
	81	5,468,663	11/1995	Bertin et al.				1	
	82	5,491,657	2/1996	Haddad et al.		-		17	
	83	5,509,134	4/1996	Fradrich et al.				-	
	84	5,606,521	2/1997	Kuo et al.			-	-	_
V	85	5,629,890	5/1997	Engh		-	-	1	
/VN/	86	5,656,840	8/1997	Yang				1	
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			U.S	Patent Documents					-
Examiner Initial	6	Document Number	Date	Name		Class	Subclass		g Date I ropriate
/VN/	87	5,675,537	10/1997	Bill et al.				1 1	торгис
I	88 :	5,708,285	1/1998	Otani et al.				1	
	89	5,712,180 .	1/1998	Guterman et al.				+	
	90	5,740,107	4/1998	Lee				_	
	91 .	5,745,475	4/1998	Ohno et al.:		-		1	
	92	5,768,287	6/1998	Norman et al.				_	
	93 .	5,771,346	6/1998	Norman et al.				_	
	94	5,818,757	10/1998	So et al.	_	-		_	
	95 :	5,867,430	2/1999	Chen et al.		\neg		-	_
V	96 :	5,894,437	4/1999	Chang et al.	\neg			_	
/VN/	97	5,956,742	9/1999 ·	Fandrich et al.	- 1	\neg		_	
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*Examiner Initial /VN/		Document Number	Date	Name		Class	Subclass		g Date If
./VN/	98	5,999,451	12/1999	Lin et al.				1	
/VN/	99	6,127,843	10/2000	Agrawal et al.		1			
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ΛN	Α	5,270,551	12/14/93	K	amimura et a	250	515.1	02/13
T	В	4,962,322	10/09/90		Chapman	327	581	
	С	4,937,787	06/26/90		Kobatake	365	185.23	
П	D	4,733,394	03/22/88		Giebel	365	201	_
	D	4,703,453	10/27/87		hinoda et al.	365	104	+
\mathbf{v}	Е	4,612,630	09/16/86		Rosier	365	201	+
ΛΝ	F	4,139,911	02/13/79		Sciulli et al.	365	207	+-
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*EXAMINER INITIAL			DO	CUI	MEN	4 T N	UМ	BEF	2	DATE		NAME	CLASS	SUB	FILING
DT	Al	4	2	1	8	7	6	4	T	1980	Furuta ct al.		365	122	
DT	A2	4	2	5	3	0	5	9		1981	Bell et al.		714	721	+
07	A3	4	4	6	0	9	8	2	Γ	1984	Gec et al.		365	185,	4
· 9T	A4	4	6	1.	2	6	3	0		1986	Rosicr		365		
DT	A5	4	7	3	3	3	9	4		1988	Giebel		714	711	<u> </u>
07	A6	4	7	6	3	3	0	5		1988	Kuo		365€	7852	
OT	A7	4	7	7	9	2	7	2		1988	Kohda et al.		7145	721	1
Dr	A8	4	7	9	9	1	9	5	L	1989	lwahashi et al.		365 €	185.2	ħ
) 7	A9	4	8	0	9	2	3	1	L	1989	Shannon et al.		365 €	2010	. ·
<u> </u>	A10	5	1	2	2	9	8	5	L	1992	Sentin		3653	185.19	
DT	All Al2	5	1	3	2	9	3	5	L	1992	Ashmore, Jr.		365	185,19	
DT.	AI3	5	1	5	}	9	0	6		1992	Sawada	- 3	714	805	
	AI4	-	1	5	1	6	2	9		1992	Sato et al.		365	201	
DT	A15	5	1	7	2	3	3	8	Ш	1992	Mehrotra et al.		365	185.03	
01	-	5	2	0	0	9	2	2	Ш	1993	Rao		365	185.09	
DT	A16 A17	5	2	3	9	5	0	5.		1993	Fazio et al.		365	185.11	
DT -	-	5	2	6	2	9	8	4	_	1993	Noguchi et al.		365	185.03	
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A	B 5,689,465	11/97	Sukegawa et al.	371	10		-			
A	C 5,751,639	5/98	Ohsawa	365	· 227					
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	A4	5	ī	5	1	9	0	6		9/29/1992	Sawada			T-	.8
	A5	5	1	5	7	6	2	9	Т	10/10/1992	Sato et al.	-	-	-	6
	A6	5	2	3	0	5	0	5	_	8/24/1993	Fazio et al.		-	-	09/
	A7	5	3	9	4	3	5	9	-	2/28/1995	Kowalski		1_	-	T
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	A13	5	7	5	Ť	6	3	9	_	5/1998	Ohsawa		-		
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_				U.S. PATENT DO	CUMENTS			
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U.S. Patent and Trademark Office PTO-892 (Rev. 01-2001)

Notice of References Cited

Part of Paper No. 7